IN THE CLAIMS

Please replace any previous listing of the claims with the following replacement listing of the claims:

Replacement Listing of the Claims

1 and 2.   (Canceled)

3.   (Currently amended) The method of claim 2~~6~~, wherein said data structure further comprises a time stamp, wherein another storage volume of said database is organized for a first one of said identified events, and wherein said ~~at least one~~other storage volume ~~of a first one of said events~~ is accessed according to said time stamp for storage and retrieval of said attributes corresponding to said first event.

4.   (Currently amended) The method of claim 2~~6~~, wherein at least one attribute of a plurality of said events and/or activities is common to at least one of said defined attribute types, and wherein ~~step (c) allocates said~~ at least one storage volume of said database is allocated to all of said common attributes.

5.   (Currently amended) The method of claim ~~1~~26, ~~wherein step (c) allocates a first one of said storage volumes for storage of values of said data of said industrial process for said attributes of at least a first one of said defined attribute types, and~~ further comprising compressing said output data which is stored in ~~said~~a first one of said storage volumes according to identity of ~~said~~values of said output data of said attributes of consecutive events and/or activities that have been allocated for storage in said first one of said storage volumes.

6.   (Currently amended) The method of claim 5, wherein said data structure further comprises a time stamp, and wherein said first one of said storage

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volumes is accessed according to said time stamp for storage and/or retrieval of said values of said <u>output</u> data, and wherein said values of said <u>output</u> data of a first event are retrieved from said first storage volume by using a value of a first time stamp for said first event or of a second time stamp value of a second one of said events that is earlier in time than said first time stamp value.

7. (Currently amended) The method of claim ~~1~~26, ~~wherein step (c) allocates a first one of said storage volumes for storage of values of said attributes of at least one of said defined attribute types,~~ wherein said attributes of ~~said~~ at least one defined attribute type <u>corresponding to a first one of said storage volumes</u> are static, and further comprising optimizing data storage in said first one of said storage volumes by omitting storage of a static value.

8. (Currently amended) The method of claim ~~1~~26, wherein said industrial process is one of a plurality of industrial processes, and wherein <u>said program operates said computer</u> ~~steps (a), (b) and (c) are performed~~ for each of said plurality of industrial processes using said data structure.

9. (Previously presented) The method of claim 8, wherein at least two of said plurality of industrial processes are different from one another.

10. (Currently amended) The method of claim ~~1~~26, further comprising presenting data values of different ones of said events and/or activities that are defined as different event and/or activity types in any one of a plurality of formats <u>to said client device</u>.

11. (Original) The method of claim 10, wherein said plurality of formats are selected from the group consisting of: row format, column format and chart format.

12.   (Currently amended) The method of claim ~~1~~26, further comprising developing a map structure for mapping diverse external names of said attributes and/or field contents thereof to a common internal attribute name and/or field content.

13 and 14.   (Canceled)

15.   (Currently amended) The computer system of claim ~~14~~27, wherein said data structure further comprises a time stamp, wherein another storage volume of said database is organized for a first one of said identified events, and wherein said other ~~at least one storage~~ volume ~~of a first one of said events~~ is accessed according to said time stamp for storage and retrieval of said attributes corresponding to said first event.

16.   (Currently amended) The computer system of claim ~~14~~27, wherein at least one attribute of a plurality of said events and/or activities is common to at least one of said defined attribute types, and wherein ~~said~~ at least one storage volume of said database is allocated to all of said common attributes.

17.   (Currently amended) The computer system of claim ~~13~~27, ~~wherein a first one of said storage volumes is allocated for storage of values of said data for said attributes of at least a first one of said defined attribute types, and~~ further comprising compressing said output data which is stored in ~~said~~ a first one of said storage volumes according to identity of ~~said~~ values of said attributes of consecutive events and/or activities that have been allocated for storage in said first one of said storage volumes.

18.   (Previously presented) The computer system of claim 17, wherein said data structure further comprises a time stamp, and wherein said first one of said storage volumes is accessed according to said time stamp for storage and/or retrieval of said values, and wherein said values of a first event are retrieved from

said first storage volume by using the value of a first time stamp for said first event or of a second time stamp value of a second one of said events that is earlier in time than said first time stamp value.

19.   (Currently amended) The computer system of claim ~~13~~27, ~~wherein a first one of said storage volumes is allocated for storage of values of said attributes of at least one of said defined attribute types,~~ wherein said attributes of ~~said~~ at least one defined attribute type <u>corresponding to a first one of said storage volumes</u> are static, and further comprising optimizing data storage in said first one of said storage volumes by omitting storage of a static value.

20.   (Currently amended) The computer system of claim ~~13~~27, wherein said industrial process is one of a plurality of industrial processes, and wherein each of said plurality of industrial processes is classified for defined event and/or activity types and defined attribute types using said data structure.

21.   (Previously presented) The computer system of claim 20, wherein at least two of said plurality of industrial processes are different from one another.

22.   (Currently amended) The computer system of claim ~~13~~27, wherein said program further presents data values of different ones of said event and/or activities that are defined as different event and/or activity types in any one of a plurality of formats<u> to said client device</u>.

23.   (Original) The computer system of claim 22, wherein said plurality of formats is selected from the group consisting of: row format, column format and chart format.

24.   (Currently amended) The computer system of claim ~~13~~27, wherein said program further develops a map structure for mapping diverse external names of

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attributes and/or field contents thereof to a common internal attribute name and/or field content.

25.   (Canceled)

26.   (New) A method for using a computer to define, store and retrieve output data of an industrial process, said method comprising:

collecting with a monitor said output data of said industrial process and providing said output data to said computer;

operating said computer with a program

(a) in response to input data entered by a user to identify one or more events and/or activities and one or more attributes thereof of said industrial process;

(b) to classify said identified events, activities and attributes according to a data structure that comprises at least one event type or at least one activity type and a plurality of attribute types;

(c) to organize separate storage volumes of said database for said classified attribute types;

(d) to use said data structure in a manner that permits access of said database by said identified activities, events and attributes thereof to store said output data in said storage volumes according to said data structure and in response to a request to retrieve that output data that corresponds to at least one of said identified activities, events or attributes that is included in said request; and

(e) to provide said retrieved output data to a client device.

27.   (New) A computer system that defines, stores and retrieves the output data of an industrial process comprising:

a computer, a database, a client device and a monitor that collects said output data of said industrial process and provides said output data to said computer, wherein said computer comprises a program that when executed on said computer performs the steps comprising:

(a) in response to input data entered by a user to identify one or more events and/or activities and one or more attributes thereof of said industrial process;

(b) to classify said identified events, activities and attributes according to a data structure that comprises at least one event type or at least one activity type and a plurality of attribute types;

(c) to organize separate storage volumes of said database for said classified attribute types;

(d) to use said data structure in a manner that permits access of said database by said identified activities, events and attributes thereof to store said output data in said storage volumes according to said data structure and in response to a request to retrieve that output data that corresponds to at least one of said identified activities, events or attributes that is included in said request; and

(e) to provide said retrieved output data to a client device.
of said database by said identified activities, events and attributes thereof.

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28.   (New) A memory media having stored thereon a computer readable program for controlling a computer that defines, stores and retrieves output data of an industrial process, wherein said computer readable program comprises:

one or more first program instructions that control said computer in response to input data entered by a user to identify one or more events and/or activities and one or more attributes thereof of said industrial process;

(b) one or more second program instructions that control said computer to classify said identified events, activities and attributes according to a data structure that comprises at least one event type or at least one activity type and a plurality of attribute types;

(c) one or more third program instructions that control said computer to organize separate storage volumes of a database for said classified attribute types;

(d) one or more fourth program instructions that control said computer to use said data structure in a manner that permits access of said database by said identified activities, events and attributes thereof to store said output data in said storage volumes according to said data structure and in response to a request to retrieve that output data that corresponds to at least one of said identified activities, events or attributes that is included in said request; and

(e) one or more fifth program instructions that control said computer to provide said retrieved output data to a client device.